



Australian Bureau of Statistics

6202.0 - Labour Force, Australia, Mar 2016 Quality Declaration

ARCHIVED ISSUE Released at 11:30 AM (CANBERRA TIME) 14/04/2016

ANNUAL SEASONAL RE-ANALYSIS

INTRODUCTION

The annual seasonal re-analysis of the Labour Force series was conducted on estimates up to February 2016. The seasonally adjusted and trend estimates in this issue reflect adjustments made as a result of this re-analysis.

While combined seasonal factors for the complete time series are estimated each month, the parameters and prior corrections are reviewed annually at a more detailed level than is possible in the monthly processing cycle. The annual seasonal re-analysis takes into account each additional year's original data and assesses the appropriateness of seasonal adjustment parameters and prior corrections.

WHAT IS SEASONAL ADJUSTMENT?

Labour Force data are collected monthly (or quarterly for some topics) using the same methods, which results in original (that is, unadjusted) monthly or quarterly time series. Seasonal adjustment is applied to some of the original series to remove influences that are:

- systematic and calendar related, for example school leavers joining the labour force every February; and/or
- systematic and related to holidays which move around between months but which still occur every year, for example Easter.

Systematic and calendar related influences which have the same timing, same direction and similar magnitude every year, are removed to create the seasonally adjusted series. The presence and size of influences due to moving holidays, the variable timing of the commencement of interviews in January and the timing of supplementary surveys are estimated using a regression-ARIMA framework and also removed. The regression-ARIMA framework enables these influences to be accurately estimated. Without accurate estimation of these effects, the seasonal pattern may be obscured, and the seasonal factors may be less accurate.

The seasonally adjusted series are then smoothed to create the trend series. Seasonally adjusted and trend series are revised each month to take account of the latest original estimates.

The ABS aims to produce high quality seasonally adjusted estimates that are without systematic related variation. These series can be used to better inform month-to-month comparisons.

Seasonally adjusted aggregate hours worked estimates include more extensive corrections for the influence of public holiday and school holiday effects. Each moving holiday is estimated and removed in the aggregate state/territory estimates. State/territory level influences are used to

estimate the school and public holiday effects in the Australia and full-time/part-time by sex estimates.

During each annual seasonal re-analysis, the framework for estimating moving holidays and variable timing of the commencement of interviews in January is assessed for appropriateness. This ensures that the impacts of these influences are being appropriately estimated from year to year, that assumptions used in the regression-ARIMA framework continue to be valid, and to implement improvements in estimation methodology.

IMPACT ON THE LABOUR FORCE DATA

To account for the changes made to the supplementary survey program from 2014, the seasonal adjustment parameters and prior corrections have been monitored and revised regularly on an ongoing basis. As a result, revisions to seasonally adjusted and trend estimates arising from the 2016 annual seasonal re-analysis have been minimal, compared with previous annual seasonal re-analyses.

ONGOING REVIEW OF METHODOLOGY

As part of a process of continuous improvement, the ABS will continue to explore options for further improving the quality of Labour Force time series. Such investigations may identify further optimisations, such as potentially changing the lengths of some seasonal adjustment filters, or changing elements of the aggregation structures for some indirectly adjusted series.

The ABS will continue to provide updates on any developments in this space within Labour Force, Australia (cat. no. 6202.0), ahead of any changes being implemented as part of the 2017 annual seasonal re-analysis.

FURTHER INFORMATION

For any queries regarding the implementation of these changes contact the National Information Referral Service on 1300 135 070, or via email at client.services@abs.gov.au.

This page last updated 15 May 2017

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence